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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/700,298

Harri Hurme

3502-1095

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YOUNG & THOMPSON
209 Madison Street
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EXAMINER

ZHU, JOHN X

ART UNIT

PAPER NUMBER

2831

MAIL DATE

DELIVERY MODE

03/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/700,298	Applicant(s) HURME, HARRI	
	Examiner JOHN ZHU	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Response to communications filed on 12/13/2007.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Puthuff (US 3,604,947).

Re claims 1 and 7, Puthuff discloses electric device and method for detecting the presence of a signal $f(t)$ of a certain frequency in a line connection (11,18), characterized in that it comprises at least three energy-storing components (12) connected in parallel to said line connection, switching means 14 (FETs) for making a connection selectively (sequential operation) from each energy storing component to a certain reference means 20 for controlling said switching means at a predetermined frequency, and means (Output) for measuring a certain quantity comparable to the energy stored from each energy-storing component (Fig. 5, 22).

Re claims 2 and 8, Puthuff discloses said switching means 14 are arranged to make a connection from each energy-storing component to the reference once during

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the cycle time of said signal to be detected (field-effect transistor of each capacitor stage is switched on during the same quarter cycle of each cycle).

Re claim 3, Puthuff discloses said energy-storing components are capacitances 12 whereby said means (Output) for measuring the quantity comparable to the energy stored comprise means for measuring the voltage difference between capacitances, and said reference is a certain standard potential 20 (Fig. 5,22).

Re claim 4, Puthuff disclosed method and circuit for detecting frequency components of a signal comprising first, second, third, and fourth storage capacitor 12 connected in parallel to input signal line 11,18 and each capacitor is connected by switch 14 (FETs) for selective switching by control circuit 22 (Fig. 5,22).

Re claims 6 and 10, Puthuff discloses post detection filtering (Notch filter)(Fig. 24).

Response to Arguments

4. Applicant's arguments filed 12/13/2007 have been fully considered but they are not persuasive.

In response to applicant's arguments that detection is not disclosed in Puthuff (Remarks, Page 8, paragraphs 1 and 2), the recitation "detecting the presence of a signal of a certain frequency in a line connection" has not been given patentable weight

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because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to applicant's argument that Puthuff does not disclose means for measuring a certain quantity comparable to the energy stored from each energy-storing component and that the Official Action offers element 22 for this recitation (Page 8, paragraph 3 -> Page 9, paragraph 2), the examiner respectfully disagrees. Output (Fig 5) is instead is used for this recitation in this and the previous rejection. Element 22 is simply the ring counter that selects the each one of the capacitances for output (Column 4, line 67 -> column 5, line 7).

Allowable Subject Matter

5. Claim 11 is allowed.
6. Claims 5 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5 and 11, the prior art does not teach or render obvious energy-storing components are inductances whereby said means for measuring the quantity comparable to the energy stored comprise means for measuring the current difference between inductances.

Regarding claim 9, the prior art does not teach or render obvious number of energy-storing components are connected to the reference in turns during the cycle time of the signal to be detected in the order from one of N , where N is an even number, and in the measurement of the value of the quantity comparable to the energy stored the values related to the first and the $(N/2 + 1)$ th component are compared, and similarly the values related to the second and the $(N/2 + 2)$ th component and so forth up to the i th and $(N/2 + i)$ th component are compared, until $(N/2 + i) = N$.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN ZHU whose telephone number is (571)272-5920. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diego Gutierrez/
Supervisory Patent Examiner, Art Unit 2831

John Zhu
Examiner
Art Unit 2858